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### **Biliterate spelling with developmental dyslexia**

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# Biliterate Spelling with Developmental Dyslexia

*Spelling performance of Spanish speaking children with and without dyslexia learning English in predominantly monolingual and bilingual schools*



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## Background

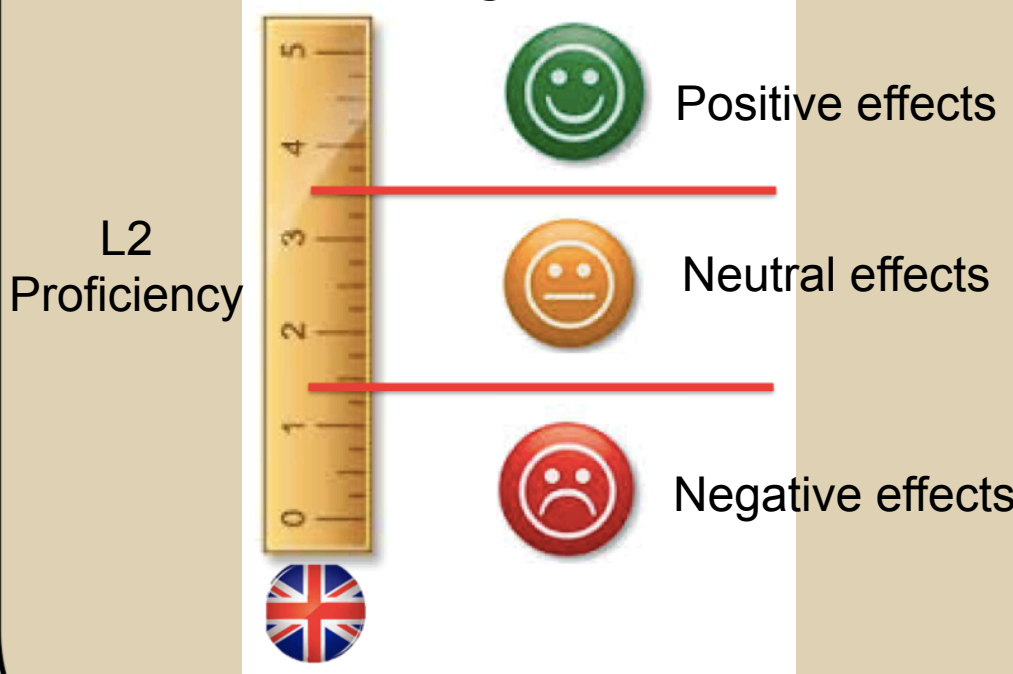
? Is dyslexia a language universal or specific deficit?



Geva & Siegel (2000)



? Do different degrees of L2 input show different effects on cognition?



Threshold Hypothesis – Cummins (1976)

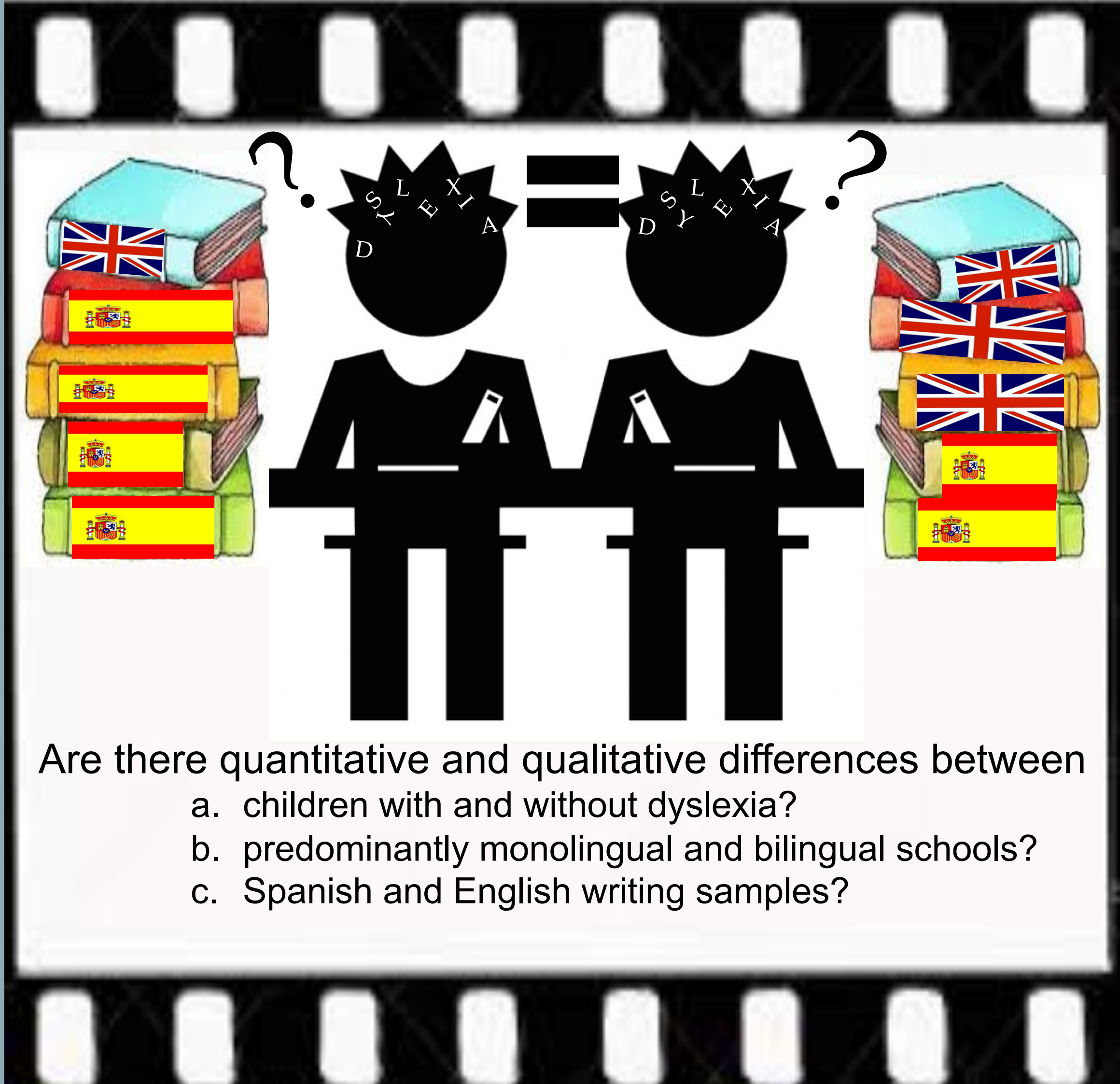
? How do orthographies of different degree of opacity develop in biliteracy?



Katz & Frost (1992)



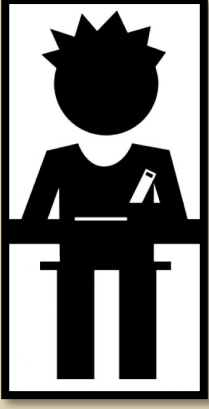
Deep ← → Shallow



- Are there quantitative and qualitative differences between
- children with and without dyslexia?
  - predominantly monolingual and bilingual schools?
  - Spanish and English writing samples?

## Participants

9 year old children



Native Spanish speakers in Uruguay



1 9 DYS  
MONOLINGUAL  
EDUCATION

2 8 DYS  
BILINGUAL  
EDUCATION

3 36 TD  
MONOLINGUAL  
EDUCATION

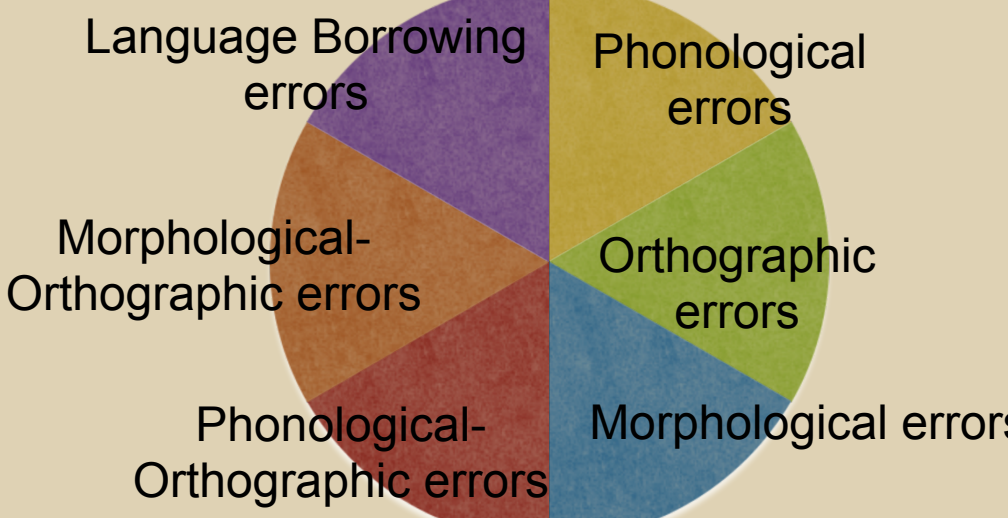
4 39 TD  
BILINGUAL  
EDUCATION

## Measures

2 writing samples after watching 5 min cartoons in



## Error coding

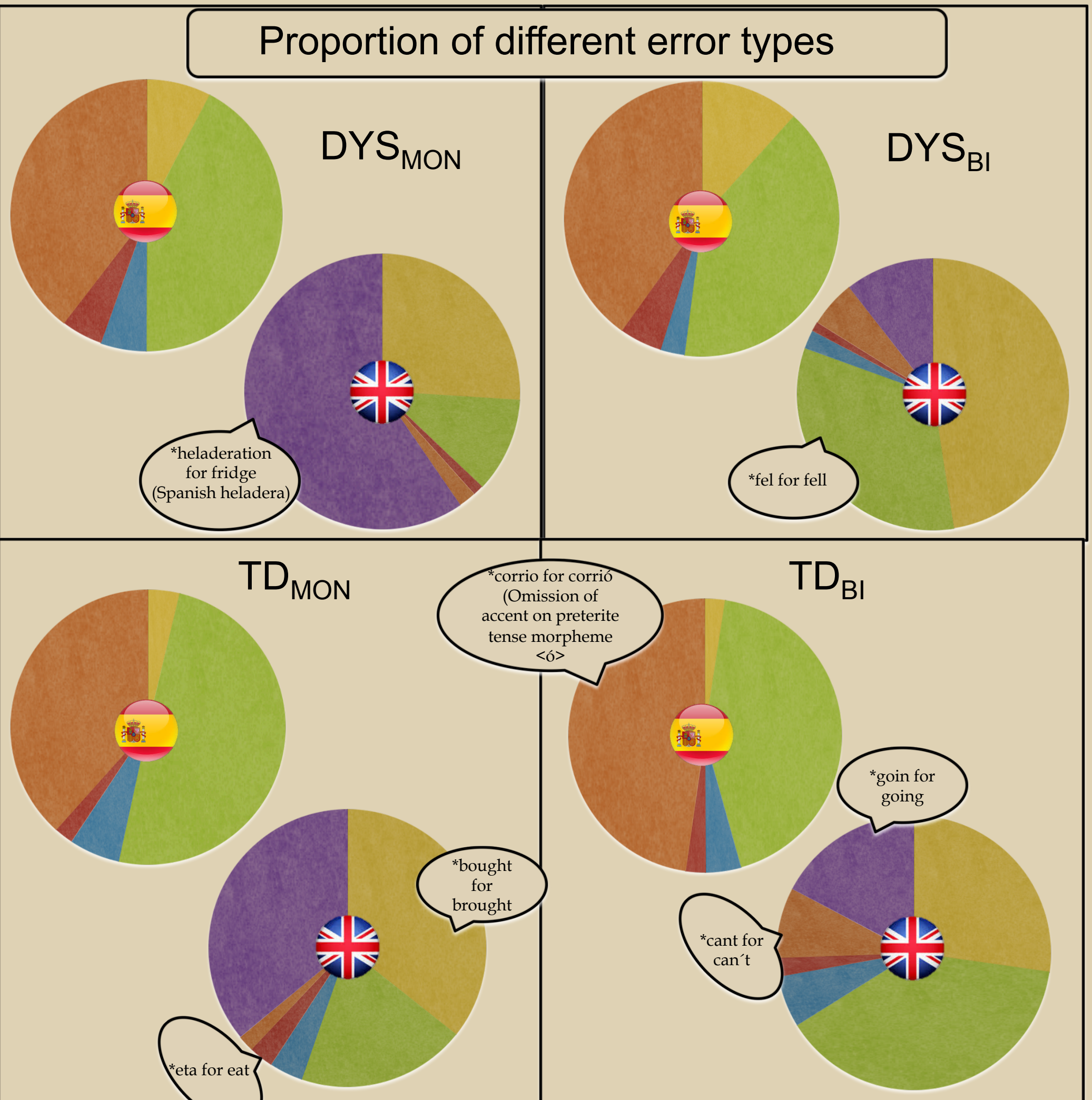
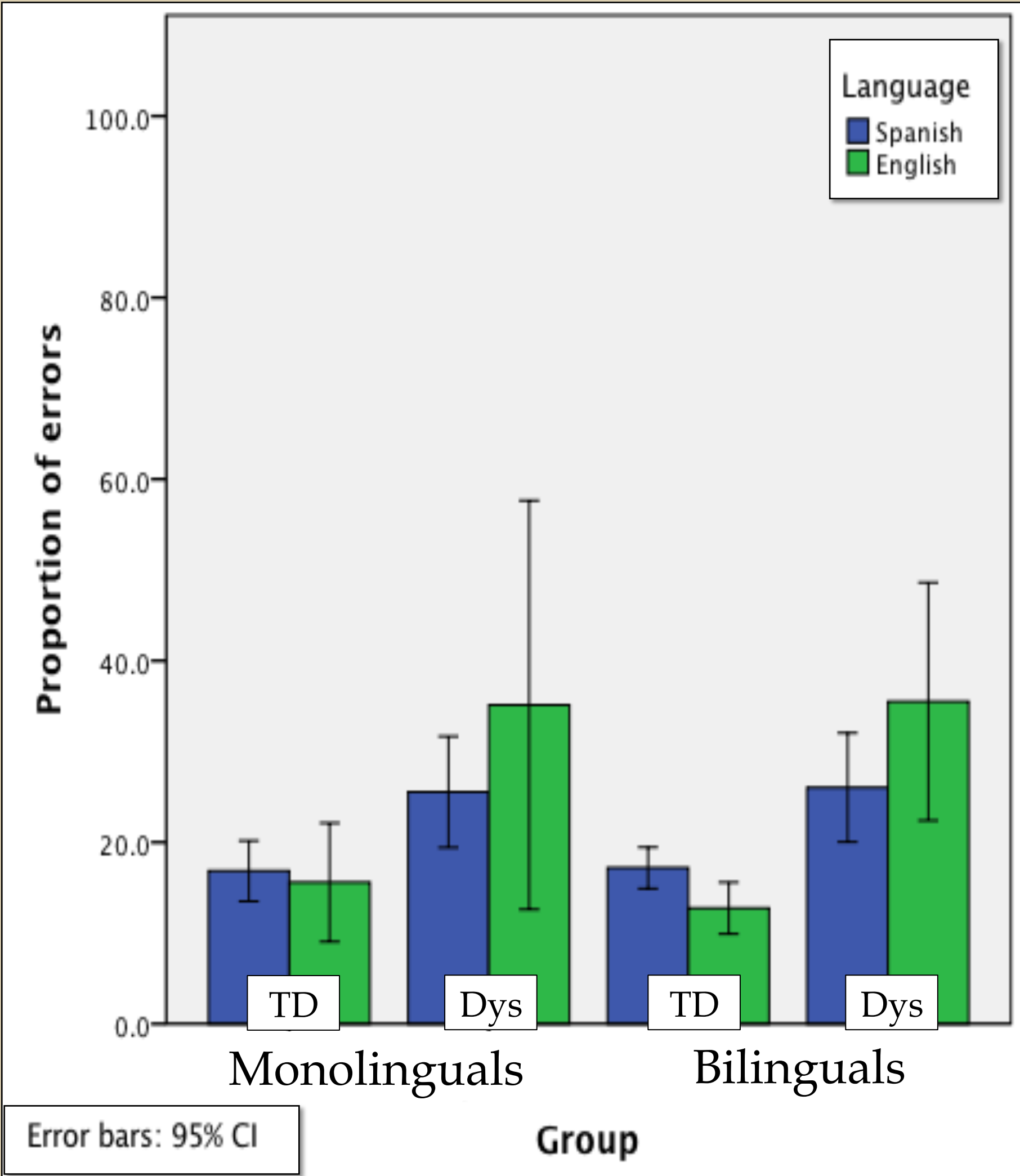


According to POMAS-S scheme  
Bahr, Silliman, Danzak & Wilkinson (2014); Bahr, Silliman, Danzak & Wilkinson (2015)

No quantitative differences between dyslexic groups

= Results ≠

Qualitative differences between dyslexic groups in error types



## Conclusion

- Universal dyslexic spelling deficit
- No effect of school type on error proportion, but on error type profile
- Language specific coordination of phonological, orthographic and morphological knowledge in biliterate spelling

**References:** Bahr, R. H., Silliman, E. R., Danzak, R. L., & Wilkinson, L. C. (2015). Bilingual spelling patterns in middle school: it is more than transfer. *International Journal of Bilingual Education and Bilingualism*, 18(1). Cummins, J. (1976). *The Influence of Bilingualism on Cognitive Growth: A Synthesis of Reserach findings and Explanatory Hypotheses*. Toronto: Ontario Institution for Studies in Education. Geva, E., & Siegel, L. S. (2000). Orthographic and cognitive factors in the concurrent development of basic reading skills in two languages. *Reading and Writing*, 12(1-2), 1-30. Frost, R., & Katz, L. (1992). The reading process is different for different orthographies: The orthographic depth hypothesis. *Orthography, phonology, morphology and meaning*, 94, 67.